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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,926	07/15/2003	Adrianus Johannes Heinen	USP169781A	6818

7590 03/10/2005  
Daniel H. Golub  
1701 Market Street  
Philadelphia, PA 19103

EXAMINER

AVERY, BRIDGET D

ART UNIT	PAPER NUMBER
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3618

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/619,926

Applicant(s)

HEINEN, ADRIANUS JOHANNES

Examiner

Bridget Avery

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
- 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

1. The abstract of the disclosure is objected to because it should be a **single** paragraph. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Stieg et al. (US Patent 4,534,748).

Stieg et al. teaches a traction assembly including a wheel comprising a wheel shaft and traction means which, when in operation, exert torque on the wheel shaft,

wherein the traction ratio, being the arm of the torque divided by a radius of the wheel, is larger than 0.57, 0.65, 0.7, and smaller than 1.0. See column 7, lines 3-59.

3. Claims 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Toida et al. (US Patent 5,691,584).

Toida et al. teaches a traction assembly for a vehicle, including a wheel provided with a wheel shaft (24), and an electric motor (4) including a drive shaft (9), a rotor (8) and a stator (7), wherein the drive shaft (9) is connected to the wheel shaft (24) for direct traction and the electric motor (4) is arranged adjacent to the wheel (3). The wheel shaft and the drive shaft are arranged in line.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-7 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stieg et al. ('4,534,748) in view of Toida et al. ('584).

Stieg et al. teach the features described above including a motor.

Stieg et al. lacks the teaching of an electric motor.

Toida et al. teaches an electric motor including the features described above.

Toida et al. further teaches a stator provided with windings that with respect to a vehicle

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are statically arranged in the vehicle and a rotor provided with permanent magnets. The rotor is arranged coaxially around the stator and connected to a drive shaft of the electric motor. The permanent magnets are connected to the wheel shaft.

5. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stieg et al. ('748) and Toida et al. ('584) as applied to claim 5 above, and further in view of Alber (US Patent 5,246,082).

The combination of Stieg et al. and Toida et al. teach the features described above.

The combination of Stieg et al. and Toida et al. lack the teaching of control means with the stator.

Alber teaches control means for the operation of the electric motor within the stator.

Based on the teachings of Alber, it would have been obvious to one having ordinary skill in the art, at the time the invention was made to modify the combination of Stieg et al. and Toida et al. to include control means within the stator to allow the control system to ascertain an exact position of the rotor relative to the stator under any condition.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mikami et al. shows a vehicle control apparatus.

Nagano et al. shows a hybrid vehicle.

Kitano et al. shows a driving force control system.

Kutter shows a hybrid drive mechanism.

Schmid shows drive devices with brake incorporated for an electrically operated vehicle.

Cho shows a self-propelled wheel for wheeled vehicles.

Toida et al. shows a wheel motor.

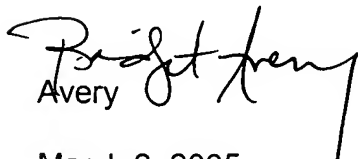
Sakai et al. shows a four wheel drive vehicle with slip control system.

Edwards shows a dual-input infinite speed integral motor and transmission device.

Stieg et al. shows a variable speed, belt driven transmission system, speed sensing driver pulley and method.

Hapeman et al. shows an electronic motorized wheel.

7. Any inquiry concerning this communication should be directed to Bridget Avery at telephone number 703-308-2086.

  
Avery

March 3, 2005



CHRISTOPHER P. ELLIS  
PATENT EXAMINER  
MAIL STOP 0000